

SECTION 3.0 – PERMIT BY RULE: Small Animal Incinerators

INSTRUCTIONS: SECTION 3.0 – PERMIT BY RULE: Small Animal Incinerators

IMPORTANT: Please make sure you do NOT use pencil to fill out the application. Please type responses or use black ink. Make sure you sign and date the application as well. If you have any questions, feel free to contact the Department of Environmental Quality via the Air Quality Construction Permit Hotline at (877) 834-0474 or the Air Quality Division at (402) 471-2989.

PART 3.1 – NOTICE OF INTENT: Small Animal Incinerators

- a) There is not a boundary requirement for small animal incinerators.
 - b) This is located in the general conditions. Small animal incinerators cannot be covering by Permit-by-Rule if it is in a non-attainment area or within 5 miles of Weeping Water, NE.
- 1) Enter the name of the manufacturer who is producing (has produced) the incinerator.
 - 2) Enter the mailing address of the manufacturer.
 - 3) Enter the city where the manufacturer is located.
 - 4) Enter the state where the manufacturer is located.
 - 5) Enter the zip code of the manufacturer.
 - 6) Provide the phone number of the manufacturer. If there are questions concerning the unit, the Department may use this to obtain answers.
 - 7) Provide an email or website of the manufacturer. If there are questions concerning the unit, the Department may use this to obtain answers.
 - 8) Enter the model number of the incinerator.
 - 9) Enter the design burn rate of the incinerator in units of pounds per hour (lbs/hr). This is the amount of material that can be incinerated (destroyed) per hour.

For all of the questions, check either yes or no to each question indicating the correct response as it applies for your facility and/or incinerator. The numbers in the lower right hand corner of each question refer to the location in Title 129, Chapter 42 in which the question content came from. Some of the questions have brief explanations below. A letter will precede the questions with explanations. The letter corresponds to the explanation. Please contact the Department of Environmental Quality via the Air Quality Construction Permit Hotline at (877) 834-0474 or the Air Quality Division at (402) 471-2989 if questions arise.

a/b) An Example: You have a Small Animal Incinerator that is permitted by the Nebraska Department of Environmental Quality under Title 129, Chapter 42: Permit-by-Rule. Your incinerator has a maximum capacity of 1500 lbs and the incineration rate indicated by the manufacturer is 130 lbs/hr.

- a) You want to incinerate several pigs. You estimate that the pigs weigh about 1000 pounds. The pigs are the unit's "load." Since you estimated the weight of the load, you must allow the incinerator to operate as if 1500 lbs. of material were loaded into the unit. Therefore, the unit will be allowed to operate for 11.55 hours.

$$\text{RunningTime} = \frac{\text{WeightofLoad}}{\text{IncinerationRate}} \qquad \frac{1500\text{lbs.}}{130 \frac{\text{lbs.}}{\text{hr}}} = 11.55\text{hrs.}$$

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- b) You want to incinerate one pig. You weigh the pig, and it weighs 200 pounds. Since you weighed the “load” you know for a fact that it weighs 200 lbs. You may operate the incinerator for the known weight. The unit should operate for 1.55 hours.

$$\text{RunningTime} = \frac{\text{WeightofLoad}}{\text{IncinerationRate}} \qquad \frac{200\text{lbs.}}{130 \frac{\text{lbs.}}{\text{hr}}} = 1.55\text{hrs.}$$

- c) Input the total rated capacity of the main chamber and afterburner in terms of million British Thermal Units per hour (add the rated capacity of the two chambers together). Then indicate how much fuel the two units combined consume. Also include units. (example. 3.0 gallons/hour)

PART 3.2 – AIR EMISSIONS TESTING: Small Animal Incinerators

Air Emissions Test Results may be submitted for the exact unit you (plan to) operate OR a unit which is identical or similar to the exact unit you (plan to) operate. Answer the first two questions accordingly.

If Testing Has Been Performed

- 10) Enter the name of the Testing Company that performed the Air Emissions Test
- 11) Enter the mailing address of the Testing Company
- 12) Enter the city where the Testing Company is located
- 13) Enter the state where the Testing Company is located
- 14) Enter the zip code of the Testing Company
- 15) Provide the phone number of the Testing Company. If there are questions concerning the air emissions test, the Department may use this to obtain answers.
- 16) Provide an email address of the manufacturer. If there are questions concerning the air emissions test, the Department may use this to obtain answers
- 17) Indicate the EPA Methods used to test the air emissions (e.g. Method 1,2,3,4,5,9,201,202, etc). The EPA Methods are described in 40 CFR Part 60 Appendices.
- 18) Provide a summary of Emissions Test performed. Fill in the table with the appropriate information for all three trials and calculate the averages. If there is anything on this table that you would like clarified, feel free to contact the Department of Environmental Quality via the Air Quality Construction Permit Hotline at (877) 834-0474.
- 19) "Opacity" means a state which renders material partially or wholly impervious to rays of light and causes obstruction of an observer's view. A certified opacity reader determines the opacity. If your emissions become very visible, you may want to have a certified opacity reader determine whether or not you are in compliance with this condition
- 20) In order to determine if you comply with this condition, divide the total amount of particulate matter emitted (in pounds/hr) by the rated heat capacity of the unit (MMBtu/hr). If the number is less than 0.6, then your incinerator meets this requirement.

If testing has been performed, a complete copy of the air emissions test results must be sent with your permit-by-rule application. The results should contain calculation sheets, field data sheets, analytical data, and equipment calibrations.

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If the air emissions test results submitted are for a similar unit, please describe why you believe the results for the similar unit accurately reflect what is expected from your unit. The following are some examples on information that could be included in this discussion:

- Example #1: The manufacturer of the incinerator provided the air emissions test submitted. The test was performed on the same model the facility plans to construct.
- Example #2: The incinerator for which the data was submitted has the same capacity, burn rate, and operating temperatures for the unit we plan to construct.

If Testing Has NOT Been Performed:

Answer the last two questions if testing has not been performed on your unit or a similar unit, which is identical or has similar characteristics to the unit you (plan to) operate. If testing results are not available, you must agree to perform testing according to the questions in order to be permitted under Title 129, Chapter 42.